4. URBAN DESIGN

The Framework Plan’s urban design principles establish policies for the development pattern and character of the built environment. Detailed development standards and design guidelines for subareas of the NCFUA must follow the general principles outlined in this section. Principles related to urban design are also included in Sections 2 and 5.

The urban design principles build on citywide policies of the General Plan, as well as recent work on the City’s Land Guidance System. The implementing principles in this section may be refined by the City prior to adoption of the Framework Plan, and may subsequently be revised without amendment to the Framework Plan. These principles will be assembled into a separate document used to review subarea plans and development proposals.

4.1 GUIDING PRINCIPLES: URBAN DESIGN

4.1a Develop two compact communities in designated areas with densities that promote pedestrian activity and transit use. The compact communities must have a relatively dense, urban character that emphasizes mixed-use development, residences within walking distance of shops and transit, and accessible public places. This pattern will be an alternative to uniform low-density suburban development that creates monolithic communities and consumes large land areas.

4.1b Design the mixed-use community cores to create high-quality pedestrian environments with building densities sufficient to support walkable shopping districts (see Figures 4-1 and 4-2).

4.1c The core residential areas should contain a mix of housing types within walking distance of the community core. The planning and design of all development in these neighborhoods must create a high-quality pedestrian environment with a horizontal mixed-use pattern of small project and parcel sizes. Figures 4-3 and 4-4 illustrate urban design principles for the core residential areas.

4.1d Peripheral residential areas should contain a mix of duplex, triplex and attached townhouses integrated with single-family detached units to achieve a diversity of house types and affordability. The peripheral residential areas should have direct pedestrian and bicycle linkages to the community core. Normally, peripheral residential areas should be within one mile of the community core. Figure 4-5 illustrates design principles for peripheral residential areas.

4.1e Local mixed-use centers should follow the same design principles for access, streetscapes, building frontages, pedestrian emphasis, mixed-use development, and parking as the mixed-use community cores. Design principles for local mixed-use centers are illustrated in Figure 4-6 and explained in Implementing Principles 4.6a-4.6c.
Figure 4-1. Mixed Use Community Core Illustrative Plan

- Retail shops and commercial services.
- Employment center.
- Multifamily dwellings (multifamily courtyards, attached townhouses, dwellings over shops).
- Public plaza or focus park.
- Child care center.
- Local transit center with regional trunkline stop.
- Public facilities (e.g., community center, post office, library, churches).
- Street system is a grid or modified grid similar to traditional urban blocks. Adjust grid to topography to minimize grading.
- Locate major arterials to the edge or outside of the mixed-use core.

- Pedestrian emphasis in all site and building design. Locate buildings along public sidewalks at front of sites.
- Mixed-use development on small parcels with "fine-grain" character.
- Provide linked network of pedestrian open spaces (courtyards, plazas, patios).
- Parking district with shared parking facilities. Structured parking encouraged where feasible.
- Locate parking facilities to interior of blocks.
- Prohibit drive-in and auto-oriented land uses.
- Provide a transit-exclusive right-of-way.
4.1f The many canyon and valley views are primarily local, short range views that
can be seen from existing public roads, public open spaces and private lands.
The location of the freeway, streets and roads throughout the study area will
effectively "open up" an extensive network of public view corridors.

4.2 IMPLEMENTING PRINCIPLES: MIXED-USE COMMUNITY CORES

4.2a The mixed-use community cores should be organized with a grid or modified
grid street system, similar to traditional urban blocks. The blocks should be
limited in size (preferably 400 feet or less in dimension) in order to create small
parcel sizes with a “fine-grained” development pattern. The street grid should
be carefully adjusted to topography so that grading is minimized.

• Alternatives to the grid/modified grid organization may be considered if they
result in a superior pedestrian environment and fine-grained, mixed-use
development pattern.

• Larger blocks and project areas that do not fit within the 400-foot grid may
be considered for developments containing a retail anchor store.

4.2b Clear pedestrian, bicycle and transit access must be provided to the community
core from the core residential and peripheral residential areas.

• Sidewalks are to be provided on both sides of all streets. Where the distance
between streets is greater than 400 feet, internal walkways should be
provided. Use connecting trails, pedestrian bridges, public steps and other
pedestrian linkages in locations where natural features separate the
community core form residential areas.

• A bikeway system must directly link the community core to all core
residential and peripheral residential areas. Bikeways should connect with
surrounding communities and be designed as recreational features. Bikeways
and bike lanes should not be located on major arterial streets. Instead,
designated bikeway systems should use the residential access and collector
streets, and/or bike paths with exclusive rights-of-way.

• The community cores should contain dedicated transit right-of-ways for bus
or light rail service providing access to the regional transit system. Where
feasible, local feeder bus or shuttle service should be provided to connect the
residential areas with the community core. Development of a local transit
center where trunk line and feeder bus service connect is encouraged and
should be located in the community core adjacent to commercial services.

• The street pattern should reinforce pedestrian circulation and not bisect
mixed-use community cores.
4.2c General categories of permitted land uses and densities for mixed-use community cores are listed in Table 3.3-C. Appropriate housing types for the community cores are listed in Table 3.3-B. Table 4.2-A specifies maximum allowable densities.

4.2d Building heights in the mixed-use community core should generally not exceed three stories, with a mix of heights desired in each block or development area. Parking which is fully below grade shall not be counted against maximum floor area ratios (FAR) or the three-story height limit.

4.2e The planning and design of the mixed-use community core shall place emphasis on creating a high-quality pedestrian environment. Sidewalks with street trees shall be provided along all public and private streets. The siting of buildings, layout of streets, location of parking areas, and design of building frontages, public streetscapes and other public spaces shall result in a compact, walkable district directly linked to the community's residential neighborhoods.

All elements of the mixed-use community core shall address pedestrian needs and develop creative approaches to improving pedestrian interest, access and enjoyment. Figure 4-2 illustrates design principles for public streetscapes and building frontages.

**TABLE 4.2-A**
MIXED-USE COMMUNITY CORE: MAXIMUM ALLOWABLE DENSITIES

<table>
<thead>
<tr>
<th>General Land Use</th>
<th>Average Net Density (FAR)</th>
<th>Maximum Net Density (FAR)</th>
<th>Maximum Net Dwelling Unit Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail and Services</td>
<td>.4</td>
<td>2</td>
<td>—</td>
</tr>
<tr>
<td>Offices and Employment Centers</td>
<td>.4</td>
<td>2</td>
<td>—</td>
</tr>
<tr>
<td>Housing (See Appendix A)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential over Retail, Services or Offices¹</td>
<td>—</td>
<td>—</td>
<td>40 du/acre</td>
</tr>
<tr>
<td>Multifamily Courtyards</td>
<td>—</td>
<td>—</td>
<td>50 du/acre</td>
</tr>
<tr>
<td>Attached Townhouses</td>
<td>—</td>
<td>—</td>
<td>15 du/acre</td>
</tr>
</tbody>
</table>

¹ In vertical mixed-use projects that place residential over retail, service or office uses, the residential shall not be counted against the non-residential FAR. This will provide an incentive for residential development in the core.

Source: Blayney Dyett Greenberg
• Place the front elevation of the building on or within ten feet of the front property line to maintain the continuity of the street edge.

• Create continuous pedestrian activity in an uninterrupted sequence. Avoid blank walls and other “dead” spaces at the ground level.

• Provide active building frontages with large window openings at ground level.

• Provide frequent street-facing pedestrian entrances.

• Locate parking to the rear of the buildings, or to the side when rear parking is not possible.

• Minimize spatial gaps created by parking or other non-pedestrian areas.

• At select corner and mid-block locations, widened sidewalk spaces may be provided for street furniture and planting.

• Create small-scale building frontages by dividing building facades into smaller parts.
4.2f Provide continuous building frontages along all public streets and sidewalks. Buildings should be placed at or near the public sidewalk.

- Design active building frontages that create inviting indoor and outdoor spaces visible from the sidewalk, and provide frequent building entrances along the street. If rear or side entrances to buildings are used, they should be accompanied by a street-facing entrance.

- Buildings may be set back from the public sidewalk if a plaza, patio, courtyard or other pedestrian space is provided between the building and the sidewalk.

- Do not locate parking facilities, blank walls, service areas or other “dead” activities along street and sidewalk frontages.

- In larger projects with private streets, the building-street edge should be designed with similar pedestrian-oriented characteristics as public streets. Private streets should not significantly reduce pedestrian activity along public streets. Inward-oriented developments separated from public streets shall be avoided.

4.2g Site planning and building design should provide a network of public, semi-public and private pedestrian spaces throughout the community core.

- Courtyards, patios, plazas, covered walkways, enclosed gardens and other spaces that create opportunities for outdoor activities should be provided in all projects. Planted building setbacks, large turfed lawn areas and other open spaces that do not contribute to the pedestrian environment should not be used.

- Within each community core, a highly visible central public plaza or other public place should be provided. The plaza should be located at, or near the center of the core, surrounded by shops, commercial services, public/semi-public buildings or other activities that create an active visual and social center of the community.

4.2h Mixed-use development accompanied by small parcel sizes that create a “fine-grained character” is encouraged throughout the community core. Horizontal and vertical mixed-use developments are encouraged.

- “Horizontal” mixed-use development is a land use pattern that locates different uses side-by-side, on adjacent parcels or on the same parcel. Commercial facilities, offices, public buildings and housing may be located in close proximity to each other. The mixing of uses will create a more balanced pattern of street activity during different times of the day, evening and week, and will also reduce parking demand by balancing the peak use periods associated with different activities.
• “Vertical” mixed-use development locates different uses in the same building, over one another. Common examples are offices located above ground floor retail, and housing above ground floor retail. While the design and financing of vertical mixed-use, opportunities may exist at selected locations in the community cores.

4.2i “Fine-grained character” strives for relatively small parcel and building sizes that create pedestrian interest and a diverse land use pattern. Fine-grained land use is closely associated with horizontal mixed-use development, and is a desired characteristic of planning throughout the community core.

A fine-grained development pattern may be achieved by:

• Reducing the size of parcels and development projects, avoiding large single-use developments.
• Dividing building masses into smaller parts providing frequent street-facing entrances, and varying building masses and heights.

4.2j Within the community core, minimize the visual impact of all parking facilities by locating them to the rear or interior portions of building sites. Parking should not be located between the front elevation of a building and the public street, nor at the corner of two public streets.

• Parking districts and other common parking arrangements with shared facilities should be provided within the community core. This will significantly reduce the number of required parking spaces and create a more compact, pedestrian-oriented district.
• Structured parking is encouraged to achieve a more compact community core. If not feasible in the immediate development program for a site, planning should provide for future conversion to structured parking accompanied by an expansion of building space.
• Structured parking will not be counted against a site’s maximum floor area ratio.
• Locate parking structures to the rear or interior portion of building sites. When a parking structure must be located facing a street, minimize its dimension along the street and provide shops or other commercial activities along the ground floor street frontage.
• Alleys or rear service drives should be used, where appropriate to minimize the visual impact of parking, loading areas and garages.
• Surface parking lots should be located to the rear or interior portion of development sites. When a parking lot must be located adjacent to a street and sidewalk, its dimension along the street should be kept to a minimum, with a planted setback used to fully screen the parking area from the street.
• Curb cuts for driveways opening to public streets should be limited. Corner properties with more than one street frontage should locate an access driveway on the street with least traffic volume. Larger projects with anchor stores that require a high-volume entrance may locate one access driveway on a collector or local street.

• Private driveways opening on arterial streets are prohibited.

4.2k Automobile-oriented land uses such as drive-in and drive-through facilities are prohibited in the mixed-use community core.
- Multifamily Dwellings:
  - Multifamily Courtyards
  - Attached Townhouses
  - Duplex-Triplex
- Single-Family Dwellings with second units
- Group Dwellings
- Neighborhood Parks and Recreation Facilities
- Child Care Centers
- Schools
- Churches, Clubs
- Grid or modified grid street system with streets adapted to topography

- Provide mix of housing types with clear walking and biking access to the Community Core
- Pedestrian emphasis in all site and building design. Locate buildings near public sidewalks with minimal setbacks
- Locate parking to interior of sites and minimize garage door openings on street. Provide alleys in developments with densities over 8 units per net acre
- Create public spaces scaled to the size of each neighborhood
- Locate major arterials to the edge or outside of the Core Residential Areas
4.3 IMPLEMENTING PRINCIPLES: CORE RESIDENTIAL AREAS

4.3a A grid or modified grid street system, as described for the mixed-use community core in Principle 4.2a, should be used as the organizing framework for the area. The grid/modified grid should be carefully adjusted to topography in order to minimize grading. Variations from the grid may be made to take advantage of urban design opportunities. For example, a street may be designed to vary from the grid to achieve visual emphasis, align with an important natural feature, or parallel the edge of a canyon.

4.3b Clear pedestrian transit and bicycle access from the core residential areas to the community core should be provided (see Principle 4.2b).

- Local feeder bus, shuttle loop or other localized transit service is encouraged to provide transit connections between the core residential neighborhoods and community core. Planning should anticipate and provide for future local transit service even if the service is not feasible at the time of project plan preparation.

4.3c The street system should emphasize connecting local streets, and minimize internal drives within projects so as to avoid closed enclaves. Larger projects must provide a public street system within them, with clear through linkages to adjacent developments. Gated projects restricting public access are prohibited.

4.3d Major arterial streets should be designed for less traffic capacity than is the current practice in the City and county. Instead, more choices of alternative routes within the community should be provided. This pattern creates more smaller collectors, instead of high-speed arterials. This slows traffic speeds and reduces the need for noise attenuation walls.

4.3e General categories of permitted land uses and net densities within the core residential areas are listed in Table 3.3 B. Non-residential uses not listed as “Compatible Activities” in Table 3.3 B may be considered if they are integrated into mixed-use projects.

4.3f Building heights within the core residential areas generally should not exceed three stories, with a mix of heights desired within each block, development area and neighborhood.

4.3g Wide sidewalks are encouraged on arterial, collector and important local residential streets.

4.3h A fine-grained mix of housing types should be achieved by providing small project and parcel sizes. If larger projects or parcels are developed, they must contain a mix of different housing types. Maximum areas for a single-housing type are two acres for multifamily housing and four acres for single-family types. Development proposals exceeding these acreage limits shall incorporate at least two different housing types from the list of appropriate housing types in Table 3.3-B.
Illustration of Townhouse and Courtyard Dwellings

- Orient buildings and individual dwelling units to the street, an interior courtyard or garden spaces on the site.

- Each dwelling unit should have a “sense of address,” either toward the street or directly to an open space on the site.

- When an outdoor courtyard or garden is used as an entrance to dwellings, open the courtyard directly to the street.

Residential Courtyard
4.3i All development shall carefully study adjacent existing buildings and sites. The fine-grained land use mix should be achieved in site planning, building height and scale among neighboring developments.

4.3j Create small-scale public open spaces in each neighborhood, and carefully integrate the public spaces with neighborhood planning. Neighborhood-scale public spaces may serve as points of visual orientation, social gathering and recreation.

4.3k All site and building design in the core residential neighborhoods should create street frontages with architectural and landscape interest for both pedestrians and neighboring residents. Site planning should provide direct pedestrian access from buildings to public sidewalks, with principal building or courtyard entrances facing the public sidewalk and street.

- Building setbacks from public sidewalks may be kept to a minimum if buildings and plantings are carefully designed for pedestrian interest. Building setbacks may range from five to 20 feet. The setback area should contain a courtyard, garden, patio, covered walkway or other outdoor space visible to pedestrians from the public sidewalk.

- As a general rule, higher building elements should be located toward the mid or rear portion of a site, with street frontages carefully scaled to the pedestrian. Normally, street frontages should be two stories or less, with taller elements stepped back from the public sidewalk. Exceptions to this principle may be made for accent elements, corner features or other elements that improve the diversity of street frontages.

4.3l Multifamily buildings should be oriented to public streets, with individual dwelling units fronting the public sidewalk, interior courtyards or garden spaces on the site.

- If most dwellings are oriented to open spaces within a site, some units should front the public street and sidewalk. When a courtyard or other outdoor space is used as an entrance to dwellings, the courtyard should open directly to the street and sidewalk.

4.3m Developments with private circulation systems should avoid creating isolated enclaves separated from the neighborhood. Within the core residential areas, private streets should be used primarily for service and parking access, not as an alternative to the public street system. Private streets which are not exclusively used for service and parking access should follow the same streetscape, pedestrian orientation and building frontage design principles as public streets, and should be accessible to the general public.
4.3n The visual impacts of parking areas and garage doors should be minimized on public streets. Enclosed parking is encouraged in residential projects.

- Alleys or rear drives should be provided for access to parking and services in all developments with net densities over eight dwelling units per net acre.

- Surface parking should not be located between the front elevation of a building and the public street. Parking areas should be placed to the rear, interior side or at an internal location on the site.
4.4 IMPLEMENTING PRINCIPLES: PERIPHERAL RESIDENTIAL AREAS

4.4a The peripheral residential areas should contain a grid or modified grid street system in areas of relatively level terrain where natural features do not intervene. In areas of sloping terrain, the street system must be designed to meet existing topographical conditions and minimize grading to the maximum extent feasible.

- “Enclosed loop” subdivisions are to be avoided. Instead, connectivity of streets is desired to integrate the peripheral residential areas and avoid isolated enclaves.

- Principles for designing street systems in relation to topography and natural features are listed in Section 4.8, “Very Low-Density and Estate Residential Neighborhoods.”

They should strive for the same streetscape quality and pedestrian orientation as the community core and core residential areas. Design principles for peripheral residential areas are illustrated in Figure 4-6.

4.4b General categories of permitted land uses and average densities of peripheral residential neighborhoods are listed in Table 3.3-B. Public and quasi-public facilities may be located in these areas, but other non-residential uses are not permitted. Building heights within peripheral residential areas should be primarily one and two stories, with third stories permitted in selected locations.

4.4c All site and building frontages should be designed to create architectural and landscape interest for pedestrians and residents. Follow the principles for streetscape character outlined in Section 4.2e. A high-quality pedestrian environment should be achieved on all residential streets.

4.4d A fine-grained mix of dwelling types and designs with small project sizes is desired in the peripheral residential areas.

- Development proposals exceeding four acres shall incorporate at least two different housing types from the list of appropriate housing types listed in Table 3.3-B.

- Requirements listed in Principle 4.3n for reducing the visual impacts of parking areas and garage doors, including provisions for alleys and rear service drives, must be followed in peripheral residential areas.

4.4e Public open spaces scaled to the size of each neighborhood should be provided in the peripheral residential areas. These may include parks and mini-parks, playgrounds, public gardens and other small open spaces.

4.4f The principles outlined in Section 4.31 should be followed for site planning of larger developments.
Figure 4-6. Peripheral Residential Areas Illustrative Plan

- Multifamily Dwellings:
  - Attached Townhouses
  - Duplex-Triplex
- Single-Family Dwellings with Second Units
- Single-Family Dwellings with Small Lots and Conventional Lots
- Child Care Centers
- Schools
- Neighborhood Parks and Recreation Facilities

- Mix of single-family and attached housing types in small development areas
- Modified grid street system, with streets adapted to topography
- Pedestrian emphasis in site and building design
- Provide alleys in projects over 8 units per net acre
- Create public spaces scaled to the size of each neighborhood
• Locate Employment Centers along freeways and major arterial edges as acoustical and visual buffers between arterials and residential neighborhoods.

• Provide restaurants, child care and business support services for centers not located adjacent to Community Cores or Local Mixed-Use Cores.

• Provide local transit service and feeder shuttles to the Community Core and regional trunk line transit stop.
4.5 IMPLEMENTING PRINCIPLES: EMPLOYMENT CENTERS

This section applies to employment centers located outside the mixed-use community cores. Employment centers within community cores should follow the principles outlined in Section 4.2. Design principles for employment centers are illustrated in Figure 4-7.

4.5a Employment centers that are not adjacent to community cores or local mixed-use centers should provide services such as restaurants, child care, business support, and other facilities that reduce the need for trips out of the centers.

4.5b Employment centers should provide street and trail connections to the mixed-use community cores and nearby local mixed-use centers.

4.5c The planning of employment centers should provide for transit service. A local transit stop should be located within walking distance of all development sites. In some instances, a local shuttle or feeder bus may be appropriate to link the center to a regional trunk line transit stop or a nearby community core.

4.5d Sites in employment centers may be developed at densities up to a maximum floor area ratio (FAR) of 1.0 with an overall average FAR not exceeding .3. Below grade parking shall not be counted against FAR.

4.5e Planted building setbacks in a range of ten to 20 feet should be provided along public streets. In instances where a building provides pedestrian interest, such as a shop or restaurant placed adjacent to a sidewalk, a setback is not required.

4.5f Scientific research, corporate office or other developments that desire large sites with landscaped open spaces should locate along the edges of SR-56 or major arterial streets. These uses provide effective acoustical and visual buffers between major arteries and residential neighborhoods.

4.5g Storage yards, parking areas, service areas, and other ground level paved areas should be screened from off-site views by perimeter and tree canopy planting. Special attention should be given to views from distant hillsides.

4.5h Large, flat-roofed areas and rooftop equipment should also be screened from off-site views.
- Retail shops and commercial services, with non-residential uses limited to 60,000 square feet
- Multifamily Dwellings:
  Attached Townhouses
  Duplex-Triplex
  Group Housing
- Public and quasi-public facilities
- Local feeder transit stop
- At least 150 dwelling units must be provided
- Pedestrian emphasis in all site and building design. Locate buildings along public streets, and parking areas to interior of sites
- Provide direct pedestrian and bicycle access to adjacent neighborhoods
- Drive-thru facilities prohibited
- Single-Family Small Lot and Conventional Lot Dwellings at 2-12 dwelling units per acre
- Child Care Centers
- Schools
- Neighborhood Parks and Recreation Facilities
- Lot and street configurations adapted to topography and natural features
- Local streets linked with adjacent neighborhoods—avoid closed loop subdivisions
- Clustering encouraged to preserve natural features and minimize grading. Clustering required in hillside areas over 25% slope
- Alleys required in developments with densities over 8 units per net acre
4.6 IMPLEMENTING PRINCIPLES: LOCAL MIXED-USE CENTERS

4.6a Each local mixed-use center must contain at least 150 dwelling units. Appropriate housing types within the local mixed-use center include duplex-triplex, attached townhouses, group housing and multifamily dwellings over commercial uses.

4.6b Local mixed-use centers are limited to 60,000 square feet of non-residential space (see Table 3.3-E).

4.6c One automobile service station is permitted in each local mixed-use center; drive-through businesses are prohibited.

4.7 IMPLEMENTING PRINCIPLES: LOW-DENSITY RESIDENTIAL NEIGHBORHOODS

Principles for design of low-density residential neighborhoods are illustrated in Figure 4-8.

4.7a Low-density residential neighborhoods should be organized in small blocks of lots with a local system of connected streets.

4.7b Local street systems that establish linkages with adjacent neighborhoods should be used. Closed loop subdivisions should be avoided. Extensive cul-de-sac systems are discouraged.

4.7c General categories of permitted land uses and average densities of low-density residential neighborhoods are listed in Tables 3.3-A and 3.3-B. Public and quasi-public uses may be located in these areas, but other non-residential uses are not permitted.

4.7d Provide neighborhood parks, children’s play areas and other public spaces scaled to the size of each neighborhood. These open spaces present opportunities to strengthen the sense of community and neighborhood identity.

4.7e Develop clear pedestrian linkages within and between neighborhoods. A trail system for walking, biking and jogging should be developed for access to the community core, adjacent residential neighborhoods, schools, playgrounds, parks and recreational opportunities. Trail systems should be designed in consultation with the Parks and Recreation department.

4.7f Principles for residential clustering (Section 4.8d), and street layout (Section 4.8g), outlined for very low-density and estate residential neighborhoods should be followed.

4.7g The visual dominance of garages on streets should be minimized by locating garages to the rear of the lot, recessing the garage or using tandem parking. Alleys or rear drives should be provided for access to parking and services in all developments over eight dwelling units per net acre.
**Illustrative Plan. Very Low-Density and Estate Residential Neighborhoods**

- Single-Family Estate lots with net densities less than 1 dwelling per acre
- Clustering required in hillside areas over 25% slope
- Clustering encouraged in other areas to preserve natural features
- Layout of lots derived from natural form of the land. Lot and street configurations adapted to topography and natural features. Avoid standard, repetitive lot shapes
- Create a wide landscaped roadway edge along arterial streets
4.8 IMPLEMENTING PRINCIPLES: VERY LOW-DENSITY AND ESTATE RESIDENTIAL NEIGHBORHOODS

Very low-density and estate residential neighborhoods occupy most of the developable land area within the NCFUA. Design principles for very low-density and estate residential neighborhoods are illustrated in Figures 4-9 and 4-10.

4.8a Very low-density and estate neighborhoods are normally organized in one of two ways:

- The first and most typical is that of large estate residential lots of one acre or more. Large portions of the individual lots remain as open space.

- The second organization, more appropriate for hillsides and areas adjacent to protected habitat areas, is clusters of smaller individual lots that preserve significant canyons, hillsides, ridges and other natural features.

4.8b Lot configuration and site design should emphasize canyons, hillsides and ridges as the visual focus points of neighborhoods. The layout of lots in these neighborhoods should adapt to existing topography and natural features, avoiding standard repetitive lot sizes and shapes.

4.8c Lot lines shall not enter, infringe upon, or be made part of any portion of the environmental tier. In addition, a landscaped transition area of 25-50 feet in width shall be placed behind lots adjacent to the protected open space system, and include berming and dense vegetation to deter people from entering the habitat areas. Signage shall direct people to access points for the open space system. (See Section 4.10 for principles related to the layout of lots, roads and buildings in hillside areas.)

4.8d The General Plan encourages residential clustering in sensitive areas to preserve and protect significant natural features. Properties designated as very low-density and estate residential development areas should follow the principles outlined in the Progress Guide and this section.

- Clustered dwellings in single-family areas are residences designed on smaller lots with higher densities than the underlying zoning would otherwise allow. Clustering allows a portion of the development site to remain as open space and is often useful to preserve significant natural features. Clustered dwellings may share common open spaces, visitor parking, roads and other facilities.

4.8e The large areas of sensitive lands that form the environmental tier surrounding very low-density and estate neighborhoods shall be accompanied by neighborhood-scaled public spaces. Public open spaces may be located to create points of focus, at a hillside edge to take advantage of a prominent view, or at a point of contact between two adjacent neighborhoods.
Figure 4-11a: Residential clustering to preserve topography and natural features

Figure 4-11b: Hilltop park on a knoll

Figure 4-11c: Open space views at street ends
4.8f Develop clear pedestrian and open space linkages within and between neighborhoods. Trail systems for walking, biking and jogging opportunities encouraged, providing access to the community cores, residential neighborhoods, schools, playgrounds, parks and recreational opportunities. Trail systems should be designed in consultation with the Park and Recreation Department.

4.8g Streets, drives, parking and emergency vehicle access should be aligned to conform, as closely as possible, to existing grades and minimize the need for the grading of slopes. Streets and other built improvements should not greatly alter the physical and visual character of the hillside.

- Create a wide landscaped roadway edge along arterial streets, using berms, dense planting and other devices that reduce the need for sound attenuation walls. When sound attenuation walls are necessary, locate them as far as possible from the roadway edge and plant the intervening space.

- Within the Coastal Zone, gated neighborhoods restricting public access to or along the coast or interfering with identified public views to or along the coast are prohibited.
Figure 4-12a: State Route 56 freeway edge
- Establish landscaped parkway along both edges of freeway.
- Where topography permits, locate freeway in excavated and bermed areas to reduce need for sound attenuation walls.

Figure 4-12b
Bridge structures should be used to cross canyons and avoid disturbance of natural features.

Figure 4-12c: Major arterial and collector street edges outside the compact communities
- Create a landscaped parkway along all major arterial and collector streets.
- Design the street edge to retain land forms, mature trees and other natural features.
- Minimize the use of sound attenuation walls. Instead, use grade changes berms and landscape elements as acoustical and visual buffers.
4.9 IMPLEMENTING PRINCIPLES: THE STREET SYSTEM

The network of visual sequences experienced from the street system will be the most visible part of the environment and will give continuity to the spatial experience of the landscape’s interconnected canyons, valleys, mesas and hillsides.

The key view sheds of the NCFUA should play an important role in the design of the paths of movement. Two types of viewsheds exist. First are views to the numerous canyons and valleys of the area. These are both close up and distant, with occasional opportunities for long view corridors along the larger canyon and valley systems. Second are the wide panoramic views across the area to distant natural features, including the Pacific Ocean and Black Mountain.

The many canyon and valley views are primarily local, short-range views that can be seen from existing public roads, public open spaces and private lands. The location of the freeway, streets and roads throughout the study area will effectively open up an extensive network of public view corridors.

This will present opportunities and constraints for the aligning of streets and roads, particularly the major arterials. The new system of roads will greatly increase public opportunities to view the landscape from a variety of vantage points. At the same time, the road system has the potential to disrupt natural features and block public views of the landscape. The most significant issue is the alignment of SR-56. The alignment will be the subject of an environmental document which will investigate a number of alternatives. The relationship of the freeway to Santa Monica Ridge and Deer Canyon, both important natural features and localized viewsheds, should be a major consideration in selecting a final alignment.

The most important panoramic views across the NCFUA are toward the west, north and northeast. These views are experienced from the upland mesas and hillsides, especially from elevations above 300 feet. The viewshed toward the Pacific Ocean through Carmel Valley is the most important of these panoramas. This view can be seen from the plateaus below Black Mountain, the mesas in the central part of the NCFUA, and from several vantage points on Del Mar Mesa.

4.9a The State Route 56 Freeway should be designed as a landscaped parkway that has a unified image and protected view corridors at key locations. The significant view sheds described above establish the framework for view corridor designation.

- The design of the parkway should reflect the character of the native landscape with wide landscaped edge zones. Travel lanes may be separated to adapt the roadway to topography and preserve natural features. Berms and tree groupings should be introduced to emphasize the parkway's relationship to the natural landscape and to reduce the need for sound attenuation walls. Overpass structures should be designed to complement the natural setting
with softened edges and rounded profiles for elevated structures and columns. The design will include the continuation of the bikeway from Peñasquitos to the coast (see Figure 4-11a).

- Provide a 100-foot-wide landscaped buffer on each side of the roadway edge. Berms and tree groupings should be introduced to emphasize the parkway's relationship to the natural landscape and reduce the need for sound attenuation walls.

- Where feasible along the parkway edges, locate land uses that open up distant views, strengthen the visual dominance of the landscape, and create acoustical buffers for adjacent residential neighborhoods. Golf courses and other active recreation areas should be considered for parkway-adjacent locations.

- The parkway interchanges should be designed as community entrances with a consistent design vocabulary. Use plant materials that reflect the indigenous landscape character.

4.9b Development should give special attention to the design of street edge conditions, strengthening the landscape character of buildings and open spaces as viewed from the street.

4.9c Outside the compact communities, the street edge should be designed to retain existing natural features and limit site improvements to landscape elements.

- Retain existing land forms, mature trees, and important rock outcroppings. The locations of driveways and utilities should avoid destroying important natural features.

- Where streets cross the open space system, bridge structures should be used to cross canyons (Figure 4-12b).

- Minimize the use of sound attenuation walls by careful site planning that employs grade changes, berms and landscape elements to provide acoustical and visual privacy.

- When sound attenuation walls must be used, they should not be visible from major arterial and collector streets. This may be accomplished by use of grade changes, berms and/or planted buffers between the wall and street, with a width of 50-100 feet recommended for the buffer (see Figure 4-12c).

4.9d Arterial streets should be designed for limited access to efficiently carry through traffic, while a secondary street system within compact communities should be designed for slower speeds, easy access, and multiple alternative paths between neighborhoods. Connections within a neighborhood should be possible without requiring the use of arterial streets.
4.ge  Design local-serving roads to balance the demand for automobile travel with the
desire to offer a safe, appealing pedestrian and bicycle environment, and to keep
road widths to a pedestrian scale acceptable in urban environments.

4.9f  Locate park and ride lots at locations adjoining transit facilities.

4.9g  Street design should limit maximum turn lane/median width, in order to
minimize the impact of streets on community character.

4.10 IMPLEMENTING PRINCIPLES: DEVELOPMENT ADJACENT TO
SIGNIFICANT NATURAL AREAS

These regulations apply to development adjacent to significant natural areas such as
the environmental tier, other significant topographic features, and the San Dieguito
River Valley Regional Open Space Park Focused Planning Area. These regulations
will apply in the focused planning area until more detailed design criteria are
established by the City Council for this area as part of the park master plan
implementation.

4.10a  Where it is necessary to floodproof a property, require the least possible
alteration of the natural drainage pattern, and minimize impacts to
downstream properties.

Within the 100-year floodplain fringe of the San Dieguito River, fill for roads
and other public improvements and/or permanent structures will be permitted
only if such development is consistent with the policies detailed in the North
City Local Coastal Program (LCP).

4.10b  Protect existing drainageways from encroachment that might affect drainage
patterns or water quality through the use of setbacks/buffers (open space
buffers described in Section 5 may serve this function).

4.10c  Development in hillside areas should conform to the unique natural setting of
each area and site, retaining the character of existing landforms and preserving
significant native vegetation.

Within the coastal zone, the grading of landforms that consist of slopes of 25
percent grade or more shall be strictly limited and shall only occur if the
applicant demonstrates consistency with the applicable policies in the North
City Local Coastal Program (LCP). Runoff and erosion control procedures
shall be utilized during all phases of project development.

4.10d  Cluster units, where appropriate, to minimize grading, roadway and driveway
intrusion into sensitive habitat areas. Neighborhoods abutting the areas of the
environmental tier such as Gonzales Canyon and McGonigle Canyon are areas
where clustering of dwellings is encouraged.
The development pattern in hillside areas should be designed so that structures do not stand out prominently when seen from a distance.

Development should not obstruct public views.

In conjunction with project proposals, disturbed areas on a site which are to be retained as open space shall be contoured to blend in with natural slopes and shall be revegetated with native plants.

Mass grading shall be avoided. Grading will be limited to the building footprint, accessory uses, and access corridors essential to the development of the site.

Development adjacent to ridges and bluffs shall minimize visual impacts to these topographic features through setbacks and landscaping, especially near major canyons or valleys.

New development shall be required to minimize erosion.

New development shall not cause an increase in the peak runoff rate when compared with storm runoff under existing conditions.

The following Implementing Principles related to building design apply to development within the San Dieguito River Valley Regional Open Space Park Focused Planning Area. These regulations may be superseded by regulations adopted in the park plan without amendment to the Framework Plan.

Structures located within the view of the park, if within 200 feet vertically and 50 feet horizontally of a ridgeline, shall be set back and be low in profile so as not to be visually prominent from the future park.

The facades of structures shall be angled at varying degrees to follow the natural topography of the site.

All exterior lighting shall be a low-sodium type with horizontal cut-off and shall be shielded downward such that the light would not be visible to the adjacent properties and the proposed park.

Rooflines shall vary in angle and height to provide a changing profile.